

**ABSTRACT**

A solid-state cold-cathode flat panel display a using thin-film-transistor (TFT) circuit is disclosed. Associated with each pixel element is a TFT circuit comprising a first and second transistor electrically cascaded and a capacitor in communication with an output of the first device and an output of the second device that may be used both to selectively address pixel elements in the display and hold pixels in their states for the frame time. Cold cathode sources are used to emit electrons that are drawn to selected pixel elements that include phosphor pads, which emit light of a known wavelength when struck by the emitted electrons.